

THE CITADEL, CIVIL, ENVIRONMENTAL, & CONSTRUCTION ENGINEERING NEWS



Summer '22
Newsletter



THE REAL WORLD, THE BEST ENGINEERING LAB

May 2022– Here at The Citadel, we have the honor of educating the future design & construction engineers for the state of South Carolina and beyond. Lectures and homework problems can provide technical skills, but may not fully convey the importance of what is calculated. Forces on a beam become mere math problems rather than a bridge that could cost lives if it fails. In order to prevent such a disconnect, CIVL and CONE faculty do their best to host guest speakers and organize site visits. Some are Citadel alumni, while others are “friends of the department”, but all have been incredibly generous with their time and projects. As such, we have many people and organizations to thank for their partnership in Spring 2022:

Site Visits

- The Citadel's Capers Hall: *Thompson Turner Construction*, Keegan Sherman '21
- Division 5 Steel, Charles Duffy
- The Cooper Hotel: *Lowe Real Estate*, Mike Mansager & Amie Hammer
- Omni Complex: *Samet Corporation*, Lionel Facemire
- Morrison Yard
- Bee's Ferry Landfill: *Charleston County Environmental Management*, Robert Lawing
- Magnolia Development: *S&ME*, Mary Beth Cline & Chuck Black
- Charleston Battery Wall Restoration: *Gulfstream Construction*, Bryan Duff '17
- GCI Construction Site
- WestEdge Development: *TerraCon*, Andy Ruocco & Melvin Williams '99 (CIVL Advisory Board); *Thomas & Hutton*, Domonic Jones '13
- *Charleston Executive Airport*: Edward Thorton & Hernan Pena

Classroom Guest Speakers

- *Landmark Construction*, Kendall Barringer & Danny Raymond '98 (CONE Advisory Board)
- *Mead & Hunt*, Raymond Hamilton '05
- *ESP Associates Inc.*, Scott Carney
- *RS&H*, Charles Young & Nick Matthews
- *Gulfstream Construction*, Bryan Duff '17
- *SC DOT*, Timothy Parker '03, '11
- *US Army Corps of Engineers*, Steven Bath '86 & Tracy Hendren
- *Reveer Group*, Rhett Reidenback
- *Donley's Concrete Construction Co*, Colin Tudor & Chris Hewitt

ASCE Student Chapter Guest Speakers

- *SEPI Inc.*, Jay Thompson & Ladd Gibson
- *Dewberry*, Amar Nayegandhi & Don Stone (SOE Advisory Board)
- *Mead & Hunt*, Nick Harrington '21 & Patrick Beuhler '13



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ASCE STUDENT CHAPTER NEWS

The 2022 Carolinas Conference took place at the University of South Carolina in March. The Citadel earned **Second Place overall** (the 16th podium finish since 1999). The teams were within the top 3 in 5 of the 7 events competed in:

- Environmental Competition: 1st Place
- Freshmore Challenge: 2nd Place
- Surveying Competition: 3rd Place
- Transportation Competition: 3rd Place
- Daniel W. Mead Paper: 3rd Place



We welcome the new ASCE Student Leaders for the 2022-2023 academic year. They are:

- President: Cadet Julian Jenkins
- Secretary: Cadet Avery Lollis
- Vice President: Cadet Josh Gibson
- Treasurer: Cadet Blayne Pennartz
- Social Chair: Cadet Cameron Cole



The newly elected student leadership of ASCE will have more duties during their tenure than most recent executive committees. **The Citadel is hosting the Carolinas Conference in Charleston, 13-15 April 2023.** Our student planning committee is led by Cadet Cameron Cole and Veteran student Neal Aldavera. If you would like to participate as an event judge or donate toward the conference, please contact faculty advisors, Dr. Timothy Mays <mays1@citadel.edu> or Dr. Simon Ghanat

DEPARTMENT HEAD'S MESSAGE: WILLIAM J. DAVIS, PH.D., P.E. (AL)



Students, faculty and staff completed an exceptionally successful academic year that concluded May 9, 2022, with commencement ceremonies and graduation of 48-civil engineers, 17-construction engineers, and two master of science in civil engineering. Year-end awards included 45-student and 10-faculty recognitions. Additionally, two student teams, comprised of 14-graduates, received the Bert Booth Williams Award for best capstone design presentation, as determined by an external expert panel. Other 2021-22 highlights include:

Program Ranking: The Citadel is # 16 in US News and World Report 2022 rankings of Undergraduate Engineering Programs, for highest degrees of bachelor's or master's <<https://www.usnews.com/best-colleges/rankings/engineering-overall>>

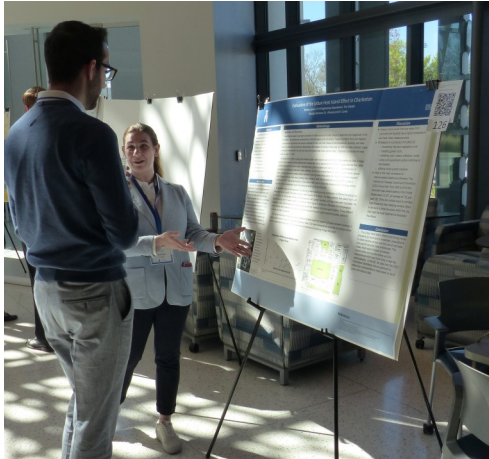
New Capstone Design Project: May 3, 2022, 9-teams including 65 civil and construction engineering students completed their capstone design-build projects and presented recommendations to a panel of aviation experts. The project assignment was to design airfield and terminal infrastructure needed to accommodate eVTOL (electric Vertical Takeoff & Landing) mobility, an emerging revolutionary travel mode, for the Rock Hill-York Co. Airport.

ASCE Carolinas Conference: Unprecedented success continues as Citadel students earned 2nd place at the 2022 ASCE Carolinas Conference, extending our record of 16-podium finishes in 23-years, including six Conference Championships and qualifying for seven national competitions. Citadel will host the conference in Charleston, April 13-15, 2023, stay tuned for details.

Academic Enrichment: During 2021-22 students participated in numerous formative activities beyond the classroom including 34-field trips, 52-meetings/guest lectures, 9-engineering conferences, undergraduate research, career expos, internships, academic competitions, community outreach, professional events, and scholarly presentations/publications.

Our student-centered teaching and learning community includes 225 civil and construction engineering students, 14-faculty, 2-staff, and 2-graduate assistants. Through great teamwork, synergy and collaboration, we strive to honor the 180-year legacy of our collegiate forefathers and build upon the great traditions of our storied engineering program at The Citadel. We remain dedicated to our central mission of developing and graduating principled engineering leaders. Please visit us on campus, or reach out, if you would like more information about our students or academic programs.

STUDENT HIGHLIGHTS & DISTINCTIONS



This year a few of our students willingly gave up part of Spring Break to present their research projects at the ASEE Southeast Section meeting hosted by The Citadel: Cadets Emma Larsen and Mary Coastal Watkins, Veteran Student Zach Campbell, and Graduate Student Negin Shamsi.



MEET OUR FIRST MSCE GRAD IN THE TRANSPORTATION CONCENTRATION

Mackenzie Kelly of Summerville, SC graduated with her Master's of Science in Civil Engineering this May and is the first student to complete the Transportation concentration. Concentrations in the MS program allow students to gain specialized knowledge relevant to their career field. Ms. Kelly will apply this as she moves into the next stage of her career at Charleston County Transportation & Development.



The Society of Women Engineers (SWE) once again hosted "Introduce a Girl to Engineering Day" at The Citadel in Spring 2022. This year's theme had the girls rescuing an astronaut lost in space with marshmallow-stick towers, wind powered rovers, and bread-board circuit message decoders. 100 Girls Scouts received engineering merit badges!



Our transportation students have been very busy in Spring 2022. Three attended the Transportation Research Board meeting in DC. Then 6 went to Boca Raton for the annual ITE conference, where Cadet Schwartz presented (above). Then four more attended the ITE Student Leadership Summit. It seems they are learning about transportation while transporting themselves around the East Coast!



GRADUATING CLASS '22 SUMMARY

On Mother's Day Weekend in May, Citadel graduates crossed the stage to receive their diplomas signifying the conclusion of their undergraduate degrees. Congratulations to all of our graduates!

	CIVL	CONE
Cadet Program:	33	17
Evening Program:	15	--
Master's Program:	2	--
Total:	50	17

Our students maintained high levels of academic achievement and were recognized with the following honors at graduation:

- Summa Cum Laude: 6
- Magna Cum Laude: 11
- Cum Laude: 9

This graduating class has some noteworthy experiences and achievements:

- Survived COVID course disruptions during sophomore and junior years
- First class to complete the new EV-TOL-based capstone design project
- First CIVL engineering team to compete (and place) in The Citadel's Baker Business Bowl

These graduates are off to bigger and better things. This includes 10 newly **commissioned officers** in the US Armed Forces. We have 6 graduates who are off to **graduate school** in the fall at The Citadel, Virginia Tech, Georgia Tech, and Clemson. Other graduates will start their **engineering careers** with companies including:

- AECOM
- ADC Engineering
- Thomas & Hutton
- JMT
- Lennar Homes

Congratulations to all our graduates and best of luck on your next adventure!

GET INVOLVED WITH THE CEE DEPARTMENT

CEE faculty strive to provide quality lectures and assignments to support student learning, but many of the most impactful experiences occur due to the generosity of our alumni community. They help us provide student experiences such as guest speaker visits, field trips, and internships. If you are interested in volunteering your time, please contact Ms. Welch at <jwelch10@citadel.edu>.



FACULTY & STAFF AWARDS

- ◆ Adjunct Faculty Ege Arslaner- "Rising Star Presidential Award" The Citadel
- ◆ Dr. Kweku Brown - "2022 Outstanding New Faculty Research Award" American Society of Engineering Education, Southeast Section
- ◆ Dr. Mary Katherine Watson - "2022 Outstanding Young Alumni Award" School of Engineering, Clemson University
- ◆ Dr. Dimitra Michalaka - "2022 Excellence in Transportation Engineering Award" Institute of Transportation Engineers, District 5
- ◆ Dr. Dan Nale - "Dr. Harry C. Saxe Teaching Award" Department of Civil, Environmental, and Construction Engineering, The Citadel
- ◆ Dr. Mostafa Batouli - "Dr. Harry C. Saxe Teaching Award" Department of Civil, Environmental, and Construction Engineering, The Citadel
- ◆ Dr. Simon Ghanat- "2022 Faculty Excellence in Teaching Award" The Citadel
- ◆ Dr. Mary Katherine Watson- "2022 Faculty Excellence in Research Award" The Citadel
- ◆ Dr. Timothy Mays- "2022 Faculty Award for Outstanding Contributions to the Graduate College" The Citadel
- ◆ Dr. Mary Katherine Watson, 2022 South Carolina Civil Engineering Educator of the Year, ASCE South Carolina

GIVING TO THE CEE DEPARTMENT

Sustaining the levels of student success highlighted in this newsletter is greatly aided by support from our benefactors. If you wish to help, you can contribute by making a donation **designated for Civil & Environmental Engineering** through The Citadel Foundation at <http://foundation.citadel.edu/> or call CEE at 843-953-5083.



Newsletter Prepared by Dr. Laughton. To submit content for future newsletters, email <slaughton@citadel.edu>

2021-22 DEPARTMENT STUDENT AWARDS

Col. Louis Shepherd LeTellier Award

James W. Gillam
Pei Hsuan Lu
William A. Metts

George Walker White Award

Chandler D. Beale
Thomas B. Keller
Collier B. Summers

Col. Charles Lindbergh Award

Ezekiel R. Durand

Christopher Schultz Gadsden Award

Rebekah E. Earhart
Edward S. Scott

CONE Student Merit Award

Pei Hsuan Lu

Capt. Benjamin Sammis USMC Award

Julian B. Jenkins
Tyler E. Long

Loring Himelright Award

Benjamin L. Kicklighter

College Transfer Program Award for Academic Excellence and Leadership

Alicia C. Brewington

Thomas C. Evans, Jr. Award

Alicia C. Brewington
Jackson H. Bridges
Connor T. Brownlee
William T. Childress
Kyle M. DiLiddo
Rebekah E. Earhart
Nicholas R. Edwards
Charles W. Fisher
Ronald D. Flowers
Everette W. Garrett
William G. Gibson
Michael G. Graupner
Blake A. Hill
Brian E. Horn
Kaleb C. Hyland
Robert G. Jennings
Thomas B. Keller
Benjamin L. Kicklighter
Emma L. Larsen
Pei Hsuan Lu
Earnest H. Maggard
William A. Metts
Samuel J. Ouzts
Andrew D. Parkhurst
Emily Perkins
Aidan K. Puzzio
Edward S. Scott
Collier B. Summers
Noel C. Turner
Alexander Wannamaker
Jack R. Wittman

THE CITADEL ENGINEERING ACADEMY

The 2022 class of inductees included 3 Civil Engineering alumni in recognition of their engineering accomplishments as well as how they embody of The Citadel's core values: honor, duty, and respect.

- ◆ Stephen Davis, PE '85
- ◆ Larry Melton, PE '84
- ◆ Tony Parker, PE '83

